

ABSTRACT OF THE INVENTION

A method of forming poly-silicon thin film transistors is described. An amorphous silicon thin film transistor is formed on a substrate, and then the Infrared
5 (IR) heating process is used. A gate metal and source/drain metal are heated rapidly, and conduct heat energy to an amorphous silicon layer. Next, crystallization occurs in the amorphous silicon layer to form poly-silicon. Therefore a poly-silicon thin film transistor is produced.